

**IN THE CLAIMS**

1. (Currently amended) A method comprising:

measuring at least one [[parameter]] characteristic parameter of processing

performed on a workpiece in a processing step;

modeling the at least one characteristic parameter measured using a correlation model; and

applying the correlation model to modify the processing performed in the processing step.

2. (Currently amended) The method of claim 1, wherein measuring the at least one

[[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one characteristic parameter at a wafer electrical test (WET).

3. (Currently amended) The method of claim 1, wherein measuring the at least one

[[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

4. (Currently amended) The method of claim 2, wherein measuring the at least one

[[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

5. (Original) The method of claim 1, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

6. (Original) The method of claim 2, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

7. (Original) The method of claim 3, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

8. (Original) The method of claim 5, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

9. (Original) The method of claim 6, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

10. (Original) The method of claim 7, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify the rapid thermal processing performed on the workpiece in the rapid thermal processing step.

11. (Currently amended) A computer-readable, program storage device, encoded with instructions that, when executed by a computer, perform a method comprising:

measuring at least one [[parameter]] characteristic parameter of processing performed on a workpiece in a processing step;

modeling the at least one characteristic parameter measured using a correlation model; and

applying the correlation model to modify the processing performed in the processing step.

12. (Currently amended) The device of claim 11, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one characteristic parameter at a wafer electrical test (WET).

13. (Currently amended) The device of claim 11, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

14. (Currently amended) The device of claim 12, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

15. (Original) The device of claim 11, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

16. (Original) The device of claim 12, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

17. (Original) The device of claim 13, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

18. (Original) The device of claim 15, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

19. (Original) The device of claim 16, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

20. (Original) The device of claim 17, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify the rapid thermal processing performed on the workpiece in the rapid thermal processing step.

21. (Currently amended) A computer programmed to perform a method comprising:  
measuring at least one [[parameter]] characteristic parameter of processing performed on a workpiece in a processing step;  
modeling the at least one characteristic parameter measured using a correlation model; and  
applying the correlation model to modify the processing performed in the processing step.

22. (Currently amended) The computer of claim 21, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one characteristic parameter at a wafer electrical test (WET).

23. (Currently amended) The computer of claim 21, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

24. (Currently amended) The computer of claim 22, wherein measuring the at least one [[parameter]] characteristic parameter of the processing performed on the workpiece in the processing step comprises measuring the at least one [[parameter]] characteristic parameter of rapid thermal processing performed on the workpiece in a rapid thermal processing step.

25. (Original) The computer of claim 21, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

26. (Original) The computer of claim 22, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

27. (Original) The computer of claim 23, wherein modeling the at least one characteristic parameter measured using the correlation model comprises modeling the at least one characteristic parameter measured using a wafer electrical test (WET) correlation model.

28. (Original) The computer of claim 25, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

29. (Original) The computer of claim 26, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify rapid thermal processing performed on the workpiece in a rapid thermal processing step.

30. (Original) The computer of claim 27, wherein applying the wafer electrical test (WET) correlation model to modify the processing performed in the processing step comprises applying the wafer electrical test (WET) correlation model to modify the rapid thermal processing performed on the workpiece in the rapid thermal processing step.

31. (New) An apparatus, comprising:

a controller for controlling a processing to perform a rapid thermal process upon a first workpiece and for controlling a measurement device to perform an electrical test upon said first workpiece to measure a characteristic parameter, said controller to model said characteristic parameter measured using a correlation model and apply said correlation model to modify said rapid thermal process performed on a second workpiece.

32. (New) The apparatus of claim 31, wherein said workpiece is a semiconductor wafer.

33. (New) A system, comprising:

a processing tool to perform a rapid thermal process upon a first workpiece and a second workpiece;

a measurement device to perform a wafer electrical test upon said first and second workpieces to measure a characteristic parameter relating to processing of said first workpiece; and

a controller for controlling said processing tool and said measurement device, said controller to model said characteristic parameter measured using a correlation model and apply said correlation model to modify said rapid thermal process performed on a second workpiece.

34. (New) The system of claim 33, wherein said workpiece is a semiconductor wafer.

35. (New) A method, comprising:

measuring at least one electrical characteristic parameter relating a rapid thermal process performed on a first workpiece;

modeling the at least one characteristic parameter measured using a correlation model;  
and

applying the correlation model to modify said rapid thermal process performed on a second workpiece.